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ANNUAL STATUS REPORT on the Uranium Mill Tailings Remedial Action Program

December 1981

Prepared in response to the
requirements of Section 114(a)
to Public Law 95-604
U.S. Department of Energy
Assistant Secretary for Nuclear Energy
Office of Nuclear Waste Management
and Fuel Cycle Programs

I

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II

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Prepared in response to the
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I. INTRODUCTION

As required by Public Law 95-604, the "Uranium Mill Tailings Radiation Control Act of 1978" (UMTRCA), this Third Annual Status Report summarizes activities undertaken during FY 1981 by the Department of Energy (DOE) and other agencies as part of the Uranium Mill Tailings Remedial Actions (UMTRA) Program.

Title I of the Act authorizes the DOE, in cooperation (1) with the states and Indian tribes within whose boundaries designated processing sites* are located and (2) with persons who own these sites, to provide a program of assessment and remedial action at such sites. Twenty-four inactive uranium-processing sites located in 10 states are presently included in the UMTRA Program (Appendix A). The purposes of the remedial actions are to stabilize and control the tailings and other residual radioactive materials located on these sites in a safe and environmentally sound manner and to minimize or eliminate the potential radiation health hazards to the public. Properties in the vicinities of designated processing sites that are contaminated with material from the sites, which are herein referred to as "vicinity properties," are also eligible for remedial action. For some sites the program might include the reprocessing of tailings to extract residual uranium and other minerals.

II. PROGRAM STATUS

Progress made during the last year, present status, and plans for FY 1982 are described below.

1. Radiological Surveys and Inclusion of Vicinity Properties

The Office of Operational Safety, which is under the jurisdiction of the DOE's Assistant Secretary for Environmental Protection, Safety, and Emergency Preparedness (ASEP), has conducted a program of radiological assessment at vicinity properties. Aerial and ground-level gamma scans with mobile units are coupled with comprehensive ground-level radiological surveys to identify individual properties for remedial action. During FY 1981, detailed radiological surveys were conducted in the vicinities of processing sites in the following locations: Canonsburg, PA, Salt Lake City, UT, and Lowman, ID. To date 57 vicinity properties have been identified and recommended for remedial action.

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* "Processing site" is defined in P.L. 95-604.

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In addition, aerial radiological surveys were conducted at 5 medium- and low-priority processing sites at the following locations: Lakeview, OR, Tuba City, AZ, Ambrosia Lake, NM, and Naturita and Slick Rock, CO.

The radon-monitoring program initiated in Canonsburg, PA, in February 1980 was continued during FY 1981. A similar program was initiated in Salt Lake City, UT, during January 1981.

In addition to the radiological surveys of vicinity properties and radon-monitoring projects at high-priority sites, the Office of Operational Safety will continue to conduct selected radiological surveys and audits during and after remedial action.

Planning documents published by the ASEP in FY 1981 include a background report and an implementation plan. A generic program plan and a Departmental Certification Order are in the final stages of preparation. The background report provides consolidated summaries of the histories of the 24 designated processing sites and describes the radiological status of each site as of March 1981. The implementation plan identifies the UMTRAP-related responsibilities of the ASEP, describes the organizational structure and functions of the Office of Operational Safety, and provides schedules and defines resource requirements within the Office.

During FY 1982, the Office of Operational Safety plans to conduct aerial radiological surveys at the processing sites in Converse County, WY, and Lowman, ID. Radiological scanning with mobile units will continue at Salt Lake City, UT, and surveys will be initiated at Durango and Rifle, CO. Detailed radiological surveys to identify additional vicinity properties for remedial action are forecast for areas surrounding the following sites: Salt Lake City, UT, Durango, New Rifle, and Old Rifle, CO, Lowman, ID, Riverton, WY, and Shiprock, NM. Radon monitoring at the Canonsburg and Salt Lake City sites will continue in FY 1982.

2. Establishment of Cooperative Agreements

The cooperative agreement between the State of Utah and the DOE, with the concurrence of the NRC, became effective on January 30, 1981. An agreement had been signed with Pennsylvania the previous year. The agreement with the State of Colorado, embracing all nine processing sites within the state, became effective on October 19, 1981.

3. Promulgation of Standards for Remedial Action

Standards for the UMTRA Program are now scheduled to be promulgated by the EPA by March 1982. (See Section 12, Environmental Protection Agency, for further details.) Under

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the provisions of P.L. 95-604, promulgation of standards will permit the DOE to begin remedial action at designated processing sites and will initiate the 7-year period authorized for performance of the program.

4. Acquisition of Lands and Materials

The Commonwealth of Pennsylvania obtained a second appraisal of the Canonsburg site in July 1981. The appraisal was submitted to and approved by the DOE after the Commonwealth supplied necessary additional information from the appraiser. Instructions to acquire the site by purchase were sent to the Commonwealth in November 1981. If the Commonwealth is unable to negotiate a purchase agreement, the DOE plans to instruct the Commonwealth to institute condemnation proceedings. Other sites will be acquired, as needed, in FY 1983-4, subject to the availability of funds.

5. Reprocessing of Residual Radioactive Materials

Public Law 95-604 requires the Secretary of Energy to request expressions of interest in reprocessing and, upon receipt of any such expressions, to evaluate whether mineral recovery is practicable. Several expressions of interest have been received; a program of drilling, sampling, and testing of the residual radioactive materials at 13 sites has begun and should be completed in February 1982. The main objective of the program is to obtain data for evaluating the economics of mineral recovery, but engineering and environmental data for use in remedial-actions studies are also being obtained.

6. National Environmental Policy Act (NEPA) Documentation

Draft environmental impact statements (DEISs) are being prepared for the proposed remedial actions at the Salt Lake City, UT, Canonsburg, PA, and Durango, CO, sites; the expected dates of publication are, respectively, July, September, and September of 1982. A determination will be made in the near future as to whether an EIS or an environmental assessment (EA) will be prepared for the Shiprock, NM, site. EAs for proposed remedial actions at 15 other sites should be completed by September 1982.

7. Program Planning

7.1 Project Planning

The status of planning documents issued or soon to be issued by the Project Office is described below.

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a. UMTRA Project Plan - under internal review at the DOE; to be published early in 1982.
b. UMTRA Project Management Plan - to be published in March 1982.
c. Health and Safety Plan - published in November 1980
d. NEPA Implementation Plan - to be published in January 1982.
f. Guidelines for Contents of Environmental Impact Statements - published November 1980.
g. Guidelines for Contents of Environmental Assessments - published in April 1981.
h. Public Participation Plan - published in May 1981.
i. Quality Assurance Plan - Sandia National Laboratories (SNL) is preparing a Quality Assurance Plan, to be published in December 1981.

7.2 Contractor Procurement

A major contract procurement was completed and another was initiated in early FY 1982. Jacobs Engineering Group, Inc. was selected for negotiation as the Technical Assistance Contractor (TAC) in November 1981 using a competitive selection process. The competitive selection process for the Remedial Actions Contractor (RAC) began in November 1981, and the RAC is scheduled to be selected by the summer of 1982. The TAC will be responsible for the implementation of site-characterization programs, preparation of Remedial Action Concept Papers for individual processing sites, development of generic and site-specific design criteria, review of detailed designs prepared by the RAC, and conducting maintenance and surveillance activities when remedial actions have been completed. The RAC will be responsible for the preparation of remedial-action designs and construction schedules, and for the performance of the remedial actions.

8. Technology Development

Eight tailings technology development programs were carried over from FY 1980, and three new programs were added. At the end of FY 1981, UMTRAP was supporting 4 programs in cover technology, 2 in liner technology, 2 in tailings conditioning and reprocessing technology, and 3 in basic studies relating to tailings behavior. The total R&D budget for FY 1981 was $5.1 million. If the standards for tailings disposal originally proposed by the EPA are changed significantly, the R&D program will be restructured accordingly.

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9. Remedial Action

Remedial action is scheduled to begin at the first high-priority processing site in FY 1984. Remedial action at the first high-priority vicinity property was started in FY 1981 in Salt Lake City, UT. Work on vicinity properties in Canonsburg, PA, and possibly in Grand Junction, CO, will be initiated when final standards are promulgated by the EPA.

10. Public Participation

Public information meetings were held in the Salt Lake City, Canonsburg, Durango, Shiprock, Grand Junction, Rifle, and Lakeview areas. An UMTRA Project documentary motion picture was completed in September 1981.

11. Interagency Program Activities

A number of meetings was held at which the agencies participating in the program appraised each other of their status and activities and provided information, as needed, for the program to progress. Specific activities and accomplishments of the other agencies involved in the program are described in the following section.

12. Other Federal Agency Activities

Included below are the full texts of contributions to this report from the four Federal agencies cooperating with the DOE on the UMTRA Program.

Environmental Protection Agency

EPA's primary responsibility under P.L. 95-604 is to "promulgate standards of general application...for the protection of public health, safety, and the environment from radiological and nonradiological hazards associated with residual radioactive materials...located at inactive uranium mill tailings sites and depository sites for such materials...." Proposed Disposal Standards for Inactive Uranium Processing Sites were published on January 9, 1981 (46 F.R. 2556). Proposed Cleanup Standards for Inactive Uranium Processing Sites (45 F.R. 27370) and Interim Cleanup Standards for Inactive Uranium Processing Sites (45 F.R. 2766) were published on April 22, 1980. A Draft Environmental Impact Statement (EPA 520/4-80-011) for the proposals was issued in January 1981. Public hearings were held in Salt Lake City, Utah, on April 24-25, 1981; in Durango, Colorado, on April 27-28, 1981; and in Washington, D.C. on May 14-15, 1981. EPA is expediting the review of comments and the development of

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final standards. The Agency is considering a number of alternatives. This might result in significant changes in the final standards. Current plans are to issue final standards by March 1982.

Nuclear Regulatory Commission

For the period October 1, 1980, through September 30, 1981, the NRC participated in and completed the following significant actions relating to the DOE's execution of the UMTRAP:

1. Permanent NRC representation on the UMTRAP R&D Program's steering committee was established. NRC review and comment were provided to DOE on the UMTRA Program to assist in assuring the most beneficial and integrated output from these technology development efforts.
2. The NRC agreed to participate, as a cooperating agency under the NEPA of 1969, with the DOE in the scoping and preparation of environmental documentation required for the UMTRAP including the NEPA Implementation Plan for the program as a whole. NRC staff conducted site visits and participated officially with the DOE and affected states in public EIS scoping meetings for the Canonsburg, PA, Salt Lake City, UT, and Durango, CO, UMTRAP sites.
3. Draft DOE Remedial Action Concept Papers for the Canonsburg, Salt Lake City, and Durango sites were reviewed by the NRC to assist in identifying all feasible remedial action alternatives for these sites.
4. The NRC provided input to DOE to help define the UMTRAP disposal site selection criteria for identifying and screening alternate disposal sites for in-depth field evaluation.
5. The NRC provided formal review and concurrence in the Remedial Action Plan for the cleanup activities at Fire Station No. 1, a vicinity property in Salt Lake City, UT.
6. The NRC reviewed the Draft Cooperative Agreement between DOE and the State of Colorado.

Department of the Interior

The two major areas of Interior jurisdiction which are affected by UMTRAP are:

--public lands, managed by the Bureau of Land Management. The Act requires that available public lands be considered among alternative sites for tailings disposal from project sites where removal might be the recommended remedial action.

--Indian lands, for which Interior exercises the Nation's trust responsibility. For UMTRAP, Secretarial approval is required for major actions agreed upon by the tribe and DOE. Interior also provides technical assistance or advice as requested in the course of evaluating eligible sites on tribal lands, and determining environmental, social, and economic implications of

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possible remedial actions.

In the past year, Bureau of Indian Affairs staff have participated with tribal officials in inspections of the sites on Indian lands with DOE staff and, in appropriate cases, with state officials. Priority sites include Shiprock, a major community of Navajo. An agreement was reached between the Navajo Nation and the DOE, covering DOE access to the Shiprock site for the purpose of obtaining data.

The Bureau of Land Management is cooperating with other agencies in the alternate-site-selection phase for possible relocation of tailings at several project sites. Officials in the affected states, notably Wyoming, Utah, and Colorado to date, have worked with local BLM staff where public lands could be appropriate as possible relocation sites. So far no specific sites have been identified on public lands.

Department of Justice

The Land and Natural Resources Division has been designated by the Attorney General to perform staff work necessary to conduct the studies under Section 115(b) of P.L. 95-604 to determine the identity and legal responsibility of any person who owned, operated, or controlled any site designated under the Act. The staff work required for the Section 115(b) study of the Canonsburg, Pennsylvania, site has been completed, and the Department's determination as to the liability or lack of liability on the part of former owners or operators is presently under final review. In addition, the Department has contracted to obtain title evidence for each site as a part of its effort to identify individuals who owned, operated, or controlled the sites. After receipt and review, this title evidence is forwarded to the Department of Energy for its use in making necessary site acquisitions. To date, complete title evidence has been received on thirteen (13) of the designated sites, and title evidence on the remaining eleven (11) designated sites is scheduled for receipt by the end of the calendar year.

As indicated in the 1980 Annual Report, the Department of Justice is defending the United States in the case of Won-Door v. United States, No. 109-78L, before the Court of Claims. Negotiations with the plaintiff's attorney are ongoing and an agreement with plaintiff to resolve the dispute by administrative proceedings pursuant to the Act appear to be in their final stages. It is also defending the Secretary of Energy and the EPA Administrator in the case Sierra Club v. Edwards et al., No. 81-1368 in the U. S. District Court for the District of Columbia. The plaintiffs contend that the defendants have failed to properly and timely comply with certain requirements of UMTRCA concerning identification of vicinity properties and the promulgation of cleanup and

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disposal standards. The Department has filed a motion to dismiss three of the plaintiff's claims for lack of subject matter jurisdiction and for failure to state a claim upon which relief can be granted, while requesting an extension of time to respond to plaintiff's fourth claim for relief regarding cleanup and disposal standards.

13. State and Indian Tribe Activities (see Appendix B)

14. Status of Designated Sites

CANONSBURG, PENNSYLVANIA-Public meetings were held in Canonsburg, Hanover Township, and Burrell Township in April and May 1981, after the nomination by the Commonwealth of Pennsylvania of candidate sites for the disposal of the Canonsburg and Burrell Township residues. The draft Remedial Action Concept Paper (RACP) was released in April, and the final version will be issued in the first quarter of FY 1982. In June, scoping meetings were held as a part of the NEPA process to receive comments from the public on issues that they wish to see addressed in the EIS. The UMTRA Project Office is considering stabilization-in-place as the preferred option in the EIS. The draft EIS will be available for public comment by the summer of 1982. Remedial action at the first vicinity properties should begin in the first part of 1982, following acquisition of the processing site.

SALT LAKE CITY, UTAH-EIS scoping meetings were held in May 1981 in Salt Lake City and in Tooele, UT, which is near 3 candidate disposal sites. The preferred option for the Salt Lake City site as defined in the draft RACP is to transport the tailings to one of the candidate locations in Tooele County; however, a feasibility study of stabilization-in-place is being performed. At the end of FY 1981, remedial actions were in progress at 2 contiguous vicinity properties: Salt Lake County Fire Station No. 1 and Harmony Park. Remedial actions are scheduled for 9 additional vicinity properties in FY 1982. The final RACP will be issued in the first quarter of FY 1982. Assay drilling has been completed, and results will be available in early 1982.

DURANGO, COLORADO-Three potential disposal sites have been identified by the State of Colorado, and site characterization is expected to begin in early 1982. The EIS scoping meetings, which outlined the remedial-action options, were held on June 30 and July 1. The draft RACP was issued in June 1981, and the final document will be published in the first quarter of FY 1982. Remedial actions at the first vicinity properties may begin before the end of FY 1982. Access to the tailings pile for sampling and assay could not be obtained this year; assays

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must be completed prior to a decision on reprocessing. At this time it appears that condemnation for right of entry will be pursued in order to obtain the required data.

SHIPROCK, NEW MEXICO-Several potentially suitable disposal areas around Shiprock were identified during preliminary studies. The Navajo Environmental Protection Commission and local Navajo Chapters have been briefed on the studies. A feasibility study of stabilization-in-place is being performed and could lead to a determination that this concept be adopted as the preferred option in the RACP. Assays on material from the Shiprock site were performed and the results will be available in early 1982.

GRAND JUNCTION, OLD RIFLE, & NEW RIFLE, COLORADO-These sites are considered together because joint disposal of the residues from all three sites is an option. Disposal-site screening began in August 1981, and 32 potential sites are being examined. The state will formally recommend candidate sites in February 1982. State and DOE officials held meetings in August with city and county personnel in Rifle and Grand Junction to initiate the formation of citizens' advisory committees. Field work for preparing environmental documentation will begin at these sites in 1982. Plans are to begin engineering and remedial actions at vicinity properties before the end of FY 1982. Preliminary indications are that there are 5000-6000 vicinity properties in the Grand Junction area alone. Assay drilling has been completed at the processing sites, and results will be available in early 1982.

OTHER SITES-The field work needed for updating previous information and preparing final environmental assessments (EAs) has been completed for the tailings sites at Green River and Mexican Hat, UT, Slick Rock and Naturita, CO, Tuba City and Monument Valley, AZ, and Ambrosia Lake, NM. Work on the EAs is 25% complete; field work is over 50% complete. The finished work includes field studies of the local ecosystems, of the surface characteristics of the land around the piles, and of the socioeconomic structure in the areas that the remedial actions would affect. Field work for preparing environmental documentation will begin at the Gunnison, CO, site in 1982.

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III. PROGRAM FUNDING

Actual expenditures for FY 1981 and projected obligations for FY 1982 are as follows:

1. FY 1981 Costs (Actual)

ASNE

Planning and Studies	1,556,000
Engineering	618,000
Environmental	1,688,000
Research & Development	4,988,000
Site Acquisition	---
Remedial Action	398,000
Management Support	2,632,000
	$11,880,000

ASEP

Aerial Surveys	360,000
Mobile & Ground Surveys	1,370,000
Radon Monitoring	640,000
Post-Remedial-Action Surveys	50,000
	$2,360,000

2. FY 1982 Obligations (based on FY 1982 congressionsal appropriations)

ASNE

Planning and Studies	1,000,000
Engineering	1,050,000
Environmental	2,693,000
Research & Development	2,918.000
Site Acquisition	900,000
Remedial Action	2,333,000
Management Support	6,706,000
	$17,600,000 *

ASEP

Aerial Surveys	100,000
Mobile & Ground Surveys	1,950,000
Radon Monitoring	670.000
Post-Remedial-Action Surveys	200,000
	$2,920,000

*Includes $1,000,000 of funds deferred from FY 1981.

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APPENDIX A

DESIGNATED PROCESSING SITES

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Figure A-1

MAP OF PROCESSING SITES

TABLE A-1. PROCESSING SITES AND PRIORITIES

STATE	LOCATION	SITE NAME	PRIORITY
ARIZONA	Monument Valley	Monument Valley[a]	Low
	Tuba City	Tuba City[a]	Medium
COLORADO	Durango	Durango	High
	Grand Junction	Grand Junction	High
	Gunnison	Gunnison	High
	Maybell	Maybell	Low
	Naturita	Naturita	Medium
	Rifle	Old Rifle	High
	Rifle	New Rifle	High
	Slick Rock	Slick Rock-NC	Low
	Slick Rock	Slick Rock-UC	Low
IDAHO	Lowman	Lowman	Low
NEW MEXICO	Ambrosia Lake	Ambrosia Lake	Medium
	Shiprock	Shiprock[a]	High
NORTH DAKOTA	Belfield	Belfield	Low
	Bowman	Bowman	Low
OREGON	Lakeview	Lakeview	Medium
PENNSYLVANIA	Canonsburg	Canonsburg	High
TEXAS	Falls City	Falls City	Medium
UTAH	Green River	Green River	Low
	Mexican Hat	Mexican Hat[a]	Medium
	Salt Lake City	Salt Lake City	High
WYOMING[b]	Converse County	Converse County	Low
	Riverton	Riverton[c]	High

[a]Processing site located on tribal lands within the boundaries of the Navajo Reservation.
[b]A site at Baggs, WY, has been removed from the list because the site was found to be located on Federal land. (See Section 101(6)(A)(i) of P.L. 95-604.)
[c]Processing site located on private property within the boundaries of the Wind River Indian Reservation.

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APPENDIX B

COMMENTS FROM STATES

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COLORADO DEPARTMENT OF HEALTH

Richard D. Lamm
Governor

Frank A. Traylor, M.D.
Executive Director

July 23, 1981

Richard H. Campbell, Project Manager
Uranium Mill Tailings Project Office
U.S. Department of Energy
Albuquerque Operations Office
P.O. Box 5400
Albuquerque, New Mexico 87115

Dear Mr. Campbell:

As requested by your July 2, 1981 letter, the following are items which are appropriate for inclusion into the Status Report to Congress, as required by PL 95-604.

1. Colorado provided a list of four (4) alternative disposal sites for consideration by DOE in the Durango effort.

2. Program development funding was provided in the past two Colorado legislative sessions.

3. No off-site or vicinity locations have been designated by DOE in Colorado. Data exists on over 7,000 such sites some of which pose significant health risk potential.

4. Aerial surveys done by DOE contractors have not been made available to cooperating states or local government entities.

5. Standards for the conduct of UMTRAP have yet to be finalized by EPA and DOE has not prepared review drafts of any regulations or operational procedures which would implement EPA proposed standards.

6. Citizen Task Forces have been suggested for public input to the Grand Junction/Rifle tailings situation.

4210 EAST 11TH AVENUE DENVER,COLORADO 80220 PHONE (303) 320-8333

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7. A memorandum of understanding has been signed and in the process of implementation between the Colorado Geological Survey and the Colorado Department of Health for the purpose of reviewing candidate disposal sites for the Grand Junction/Rifle tailings.

8. Four (4) policies were developed by Colorado, addressing cooperative agreement negotiations, candidate site review processes, remedial action plan concurrence and radiological engineering assessment reviews.

9. A NEPA process and Durango project scoping meeting was held in Durango June 30, and July 1, 1981.

10. A cooperative agreement between the State of Colorado and USDOE should have been signed by the end of the current federal fiscal year.

While there were many more individual efforts, the above summarizes actions taken and continuing concerns.

Sincerely,

Albert J. Hazle
Director
Radiation and Hazardous Waste
Control Division

AJH/jl

cc: Dr. Frank A. Traylor
Office of the Governor

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COMMONWEALTH OF PENNSYLVANIA
URANIUM MILL TAILINGS RADIATION CONTROL ACT OF 1978, P.L. 95-604
SUMMARY OF ACTIVITIES
OCTOBER 1, 1980 THROUGH SEPTEMBER 30, 1981

The Pennsylvania General Assembly passed legislation in 1980 authorizing the State to participate in the UMTRA program. H.B. 1899 gives the Department of Environmental Resources (DER) the authority 1) to enter into agreements with the Department of Energy (DOE), 2) to acquire property, 3) to pay relocation costs, and 4) to perform in cooperation with the DOE remedial action; all in accordance with the provisions of the Uranium Mill Tailings Radiation Control Act of 1978. A request for funding is being prepared and will be submitted in 1981. This request is based on estimated program costs received from the UMTRA Project Office.

The Department has been very involved in obtaining real estate appraisals of the Canonsburg Industrial Park. By mutual agreement the initial appraisal, which was submitted to DOE in December 1979, considered the occupied portions of the former processing site not to be contaminated. In November 1980, we were advised by DOE that the first appraisal was not acceptable because it did not meet Federal standards concerning acquisition of real estate and did not reflect the radiation problem existing at the site. Specific instructions for the management of the second appraisal were received from DOE in April 1981. The second appraisal was conducted in accordance with the Uniform Appraisal Standards for Federal Land Acquisitions and it includes an analysis of the extent to which the presence of residual radioactive material and contamination diminish or enhance the market value of the site. The second appraisal was submitted to DOE on July 2, 1981.

In April 1981, two public meetings were held in Washington County, one in the Canonsburg area the other the Hanover Township area. Representatives of DER and DOE were present at the meetings to discuss the remedial action options that were being proposed to rectify the situation at the Canonsburg Industrial Park. Considerable effort was made to correct a misconception that a decision to transfer the tailings from Canonsburg to a new disposal site in Hanover Township had already been made. It was emphasized that a final decision could and would not be made until after the completion of the environmental impact process required by the National Environmental Policy Act.

Scoping meetings were held in June 1981 to give members of the general public an opportunity to present comments or suggestions for consideration in the Environmental Impact Statement. A representative of the Department was a panel member at the scoping meetings.

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August 26, 1981

Mr. Richard H. Campbell, Project Manager
Uranium Mill Tailings Project Office
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Albuquerque Operations Office
P.O. Box 5400
Albuquerque, New Mexico 87115

Dear Mr. Campbell:

In reference to your letter of July 2, 1981 requesting a summary of participation by New Mexico in the Uranium Mill Tailings Remedial Action Program, the following information is furnished.

1. In February this office reviewed the December 1980 Draft report by Ford, Bacon and Davis, Utah, Inc. of Phase II-Title I Engineering Assessment of Inactive Uranium Mill Tailings, Shiprock Site, Shiprock, New Mexico. The detailed analysis found significant shortcomings in the radiological, geological, hydrological and geochemical aspects of the report. Recommendations were made to correct the deficiencies.

2. The Radiation Protection Bureau reviewed the New Mexico State Information Handbook by Politech Corporation in April and furnished new information for the updating of that handbook.

3. Also in April this office worked with Politech Corporation and provided approval for the drilling and transportation of core samples from inactive tailings piles from and through New Mexico.

4. At the request of DOE, Albuquerque Operations Office, the Bureau reviewed the updated Ambrosia Lake Site Engineering Assessment prepared by Ford, Bacon and Davis, Utah, Inc. On May 8, 1981 detailed comments were provided to DOE. Again

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significant shortcomings were found in the radiological, geological, hyrdrological and geochemical areas of the report. Also the options for disposal of the tailings were extremely limited. It is assumed that more detailed assessments will appear in final versions.

5. A member of the Bureau participated in a public hearing at Durango, Colorado, sponsored by the Environmental Protection Agency on April 27 and 28 on the subject of Proposed Disposal Standards for Inactive Uranium Processing Sites.

6. In June the Governor and the Secretary of the Health and Environment Department responded to letters from the Environmental Protection Agency for comments on the Proposed Disposal Standards for Inactive Uranium Processing Sites. The state pointed out several inconsistenciesin the regulations. Also the state may be unable to adapt to some of the rigid requirements which do not consider the environment of New Mexico.

7. Members of the Bureau have performed detailed inspections of the old Phillips Mill and the tailings pile at Ambrosia Lake twice during the year. (Note that the (IX) portion of the mill is still in operation. No tailings are being deposited). Also limited tailings pile surveys were made and the Bureau has continued monitoring radon in the entire Ambrosia Lake mining area.

8. The Title I project officer, Thomas B. Christiansen attended the UMTRAP Tailings Technology Meeting at Grand Junction, Colorado on August 10, 1981 and toured the tailings pile there. Information from the meeting and quarterly reports have been passed on to Anaconda and the industry. Anaconda expects to start stabilization and reclamation of their tailings pile near Grants, New Mexico in the near future and has expressed an interest in the results of the tests and experiments being conducted at Grand Junction and Salt Lake City.

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It is noted that negotiations on the State/DOE agreement have not been completed nor is any action on going at this time.

If further information is required please contact this office.

Sincerely,

Alphonso A. Topp, Jr., Chief
Radiation Protection Bureau

TBC/AAT/dm

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October 12, 1981

Mr. Richard H. Campbell
Project Manager
Uranium Mill Tailings
Projects Office
Department of Energy
Albeuquerque Operations
Office
P.O. Box 5400
Albeuquerque, New Mexico 87115

Dear Mr. Campbell:

Referenced is your letter dated July 2, 1981, requesting a summary of this Department's participation from October 1, 1980 to September 30, 1981, in the program relating to Uranium Mill Tailings Remedial Actions.

From the period October 1, 1980 through the present date this Department has received and reviewed the following correspondence.

1. Draft "Environmental Impact Statement for Remedial Action Standards for Inactive Uranium Processing Sites" which is a December 1980 publication of the Environmental Protection Agency.

2. Statement of work for the Technical Assistance Contractor for the Uranium Mill Tailings Remedial Actions Project which was sent from your office along with a letter dated April 2, 1981.

3. The draft "Engineering Assessment for the Belfield Site" prepared by the firm of Ford, Bacon and Davis Utah, Inc. that was sent to us from your office along with a letter dated January 15, 1981.

Finally, in conjunction with the Uranium Mill Tailings Remedial Action Program (UMTRAP) all supplementary additions and updated items sent for insertion into the Site Information Handbooks for Belfield and Bowman and for the State Information Handbook have been reviewed and inserted into the appropriate sections of those handbooks.

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This Department will continue to assist the Department of Energy in any manner possible for the Uranium Mill Tailings Remedial Actions Project.

If you should have any questions, please feel free to contact this Department.

Sincerely,

Dana K. Mount

Dana K. Mount, P.E.
Director
Division of Environmental
Engineering

DKM/SPC:saj

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APPENDIX C

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